

REMARKS

Applicants respectfully request reconsideration and reexamination of the present application in light of the amendments and the remarks below.

Claims 1-10 are pending in this application. Claims 1, 2, 4, and 6-8 have been amended. These claim amendments are made to clarify the subject matter therein. Therefore, these amendments are submitted in order to place the claims in condition for allowance, and do not disclaim any subject matter to which the Applicants are entitled.

Rejection Under 35 U.S.C. § 112, first paragraph

The Examiner rejected claims 1-10 under 35 U.S.C. § 112, first paragraph, because the specification, while being enabling for chloronicotinyl compounds, does not reasonably provide enablement for nicotinylic compounds. The specification does not enable any person skilled in the art to which it pertains, or with which it is mostly nearly connected, to make and use the invention commensurate in scope with these claims (paper 10, page 2).

Claims 1, 2, 4, and 6-8 have been amended to recite chloronicotinyl compounds. Support for these amendments may be found, for example, on page 4 of the specification. Thus, based on the disclosure of the specification, one skilled in the art could prepare a composition or formulation comprising a pyrethroid and a chloronicotinyl compound. That is, examples of pyrethroids are provided on page 3 of the specification, and examples of chloronicotinyl compounds are provided on page 4 of the specification. Furthermore, methods of preparation, and composition and formulation components (e.g., solvents and auxiliaries) are described on pages 10-12 of the specification. Therefore, the specification does enable any person skilled in the art to which it pertains, or with which it is mostly nearly connected, to make and use the invention commensurate in scope with these claims.

The Examiner also stated that "the synergistic effect of the combination with chloronicotinylic compounds are not disclosed." Table 2, found on page 17 of the specification, illustrates the synergistic effect of the combination of permethrin (a pyrethroid) and imidacloprid (a chloronicotinyl compound). For example, on Day 28 of the study, permethrin demonstrated only a 79% kill rate, and imidacloprid exhibited only a 39% kill rate, whereas the combination of permethrin and imidacloprid produced a 92% kill rate. Thus, the combination of permethrin and imidacloprid has a synergistic effect, as disclosed in the specification.

It is thus submitted that the claims meet the requirements of 35 USC § 112, first paragraph, and reconsideration and withdrawal of the present rejection is respectfully requested.

Rejection Under 35 U.S.C. § 103(a)

The Examiner rejected claims 1-10 under 35 U.S.C. § 103(a) as unpatentable over Dorn, et al., (U.S. Patent No. 6,232,328) (Paper No. 10, pages 2-3). Applicants respectfully traverse.

To properly maintain a rejection under 35 U.S.C. § 103, three conditions must be met. First, the prior art must have suggested to those of ordinary skill in the art that they should make the claimed composition or device or carry out the claimed process. Second, the prior art must also have revealed that in so making or carrying out, those of ordinary skill in the art would have a reasonable expectation of success. Both the suggestion and the reasonable expectation of success must be adequately founded in the prior art and not in the Applicant's disclosure. Finally, the prior art reference must teach or suggest all the claim limitations. *See In re Vaeck*, 20 USPQ2d 1438, 1442 (Fed. Cir. 1991).

The present invention relates to compositions and methods for controlling parasitic insects and acarids comprising a combination of synergistic effective amounts of a pyrethroid and a chloronicotinyl compound.

Dorn, et al., discloses a method for the non-systemic control of parasites using agonists or antagonists of nicotinic acetylcholine receptors. However, Dorn, et al., does not teach or suggest that the combination of synergistic effective amounts of a pyrethroid and a chloronicotinyl compound would be effective for controlling parasitic insects and acarids. That is, Dorn, et al., mentions that the "active compounds can be present in the form of a mixture with synergists or other active compounds" (lines 5-7, column 17). However, Dorn, et al., then mentions that the active compounds include insecticides, such as phosphoric or phosphonic acids, carbamates, amidines, hormones, and pyrethroids (lines 7-9, column 17). Thus, Dorn, et al., does not teach or suggest that pyrethroids or chloronicotinyl compounds are synergists, nor a combination of pyrethroids and chloronicotinyl compounds possess a synergistic effect. Therefore, the reference does not teach or suggest every element of the claimed invention, and therefore, does not support a rejection of the claims under U.S.C. § 103(a).

Furthermore, based on the disclosure of Dorn, et al., one skilled in the art would not have been motivated to combine a pyrethroid and a chloronicotinyl compound with the requisite reasonable expectation of success. That is, one skilled in the art would not have been motivated to combine a pyrethroid and a chloronicotinyl compound with the expectation of producing a synergistic effect. The combination of a pyrethroid and a chloronicotinyl compound demonstrated enhanced activity against acarids (Table 2 on page 17 of the specification) as compared to administration of either a pyrethroid or a chloronicotinyl compound alone. This combination provided a faster kill of acarids as compared to administration of a pyrethroid or a chloronicotinyl compound alone. Based on the disclosure of Dorn, et al., one skilled in the art would not have known that this combination, a pyrethroid and a chloronicotinyl compound, would provide a synergistic effect. Thus, Dorn et al., does not teach or suggest the

compositions or methods of the present invention and the requisite reasonable expectation of success is absent.

Therefore, it would not have been obvious to one skilled in the art, based on the disclosure by Dorn, et al., to combine a pyrethroid and a chloronicotinyl compound with the expectation of producing synergistic activity, that is, enhanced and prolonged activity against acarids.

It is therefore respectfully submitted Dorn, et al., fail to teach or suggest the compositions or methods as presently claimed, and that the current invention is novel and nonobvious in view of the prior art references. For the foregoing reasons, Applicants respectfully request reconsideration and withdrawal of the present rejection.

CONCLUSION

For the foregoing reasons, Applicants submit that the claims are in condition for allowance and Applicants respectfully request reexamination of the present application, reconsideration and withdrawal of the present rejections, and entry of the amendments. Should there be any further matter requiring consideration, Examiner Qazi is invited to contact the undersigned counsel.

If there are any further fees due in connection with the filing of the present reply, please charge the fees to undersigned's Deposit Account No. 13-3372. If a fee is required for an extension of time not accounted for, such an extension is requested and the fee should also be charged to undersigned's deposit account.

Respectfully submitted,


Susan M. Pellegrino
Reg. No. 48,972

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Bayer Pharmaceuticals Corporation
400 Morgan Lane
West Haven, CT 06516-4175
Telephone: (203) 812-6450
Facsimile: (203) 812-6459
susan.pellegrino.b@bayer.com